



(19)

Generated Document.

(11) Publication number: **01208834 A****PATENT ABSTRACTS OF JAPAN**(21) Application number: **63032930**(51) Intl. Cl.: **H01L 21/302**(22) Application date: **17.02.88**

(30) Priority:

(43) Date of application publication: **22.08.89**

(84) Designated contracting states:

(71) Applicant: **AGENCY OF IND SCIENCE & TECHNOL**(72) Inventor: **NAKAMURA NOBUO
NAKAGAWA KIYOKAZU
KURE TOKUO**

(74) Representative:

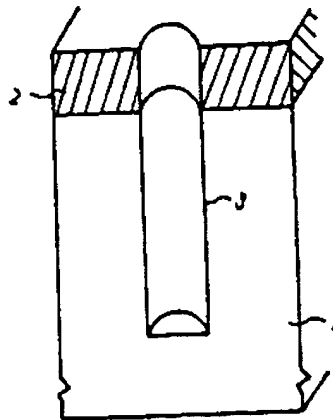
(54) ETCHING METHOD

(57) Abstract:

PURPOSE: To improve the accuracy of etching for fine working by using the mixed gas of an isotropic etching gas being represented by SF₆ and having large reactivity and an anisotropic etching gas containing heavy ions easy to be dissociated to a symmetrical shape.

CONSTITUTION: A mixed gas mainly comprising at least one kind of a gas selected from a group composed of SF₆, CF₄, NF₃, XeF₂ and F₂ as an isotropic etching gas and at least one kind of a gas (where X represents at least one kind selected from a group consisting of Cl, Br, I and H) selected from a group made up of (CXF₂)₂, (CX₂F)₂ and (CX₃)₂ is employed, and plasma etching is conducted.

Accordingly, since etching can be performed by extremely low high frequency power, a resist can be used as an etching mask, and a vertical etching hole 3 can be formed when an Si substrate 1 is etched, employing the resist 2 as the mask.



COPYRIGHT: (C)1989,JPO&Japio